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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,122	03/29/2001	Kavitha Vallari Devara	US 010134	5639
24737	7590	11/22/2005	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			SALTARELLI, DOMINIC D	
			ART UNIT	PAPER NUMBER

2611

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/821,122

Applicant(s)

DEVARA, KAVITHA VALLARI

Examiner

Dominic D. Saltarelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 6, 2005 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new grounds of rejection.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 17-20 are directed towards an abstract data stream. For claimed limitations to comprise statutory subject matter, "The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02." see MPEP 2106.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-5, 7, 9, 11-13, 17, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tranchard et al. (EP 0 926 894 A1, of record) [Tranchard] in view of Feder et al. (US 2001/0024239 A1) [Feder].

Regarding claims 1, 5, 9, 13, and 17, Tranchard discloses a transceiver (fig. 1) comprising:

an input connection receiving an incoming transport stream (multiplexer 4 shown in fig. 1, col. 5, lines 26-46);

an output connection from which a new transport stream is transmitted (modulator 5 shown in fig. 1, col. 6, lines 14-18), said new transport stream include at least portions of said incoming transport stream (only certain portions are filtered out of the stream, col. 8 line 54 – col. 9 line 13);

an adaptive data insertion mechanism (scrambler 1 shown in fig. 1, illustrated in fig. 2, col. 7, lines 8-13) for inserting data within a transport stream without destructive disturbance (using packet insertion unit 25 shown in fig. 2, col. 10, lines 18-25) comprising:

a bandwidth estimator producing an estimate of available bandwidth within said transport stream (PID counter 21 shown in fig. 2, col. 8, lines 29-42);

a scheduler (packet insertion unit 25 shown in fig. 2) prioritizing and scheduling insertion of content to be inserted within said transport stream based upon said estimate of available bandwidth and characteristics of said insertion content (col. 10, lines 18-56); and

an insertion unit (packet insertion unit 25 shown in fig. 2) inserting scheduled insertion content within said transport stream by replacement of selected replaceable content within said transport stream to form a new transport stream (col. 1, lines 18-25).

Tranchard fails to disclose also producing an estimate of future available bandwidth within said transport stream from future programming to be transmitted by said transport stream.

In an analogous art, Feder teaches storing the bandwidth requirements for particular programming, so that said values may be used in better predicting future bandwidth considerations (paragraphs 371 and 373).

It would have been obvious at the time to a person of ordinary skill in the art to modify the data insertion mechanism of Tranchard to include storing the bandwidth requirements for programming, as taught by Feder, so that said values may be used in better predicting future bandwidth considerations, as said stored values provide indications of the amount of bandwidth which will be utilized in the future when said programming is broadcast.

Regarding claims 3, 7, 11, and 19, Tranchard and Feder disclose the data insertion mechanism, transceiver, method, and data transport stream of claims 1, 6, 9, and 17, wherein said insertion unit (25) replaces selected packets within said transport stream which include one of one or more selected packet type identifiers (PID values) with packets for said insertion content while passing packets which include packet type identifiers other than said selected packet type identifiers to form said new transport stream (only the null packets are replaced for insertion of content, Tranchard, col. 10, lines 18-56).

Regarding claims 4, 12, and 20, Tranchard and Feder disclose the data insertion mechanism, method, and data transport stream of claims 3, 11, and 19, wherein said insertion unit (25) replaces null packets (Tranchard, col. 10, lines 18-25) within an MPEG-2 transport stream (Tranchard, col. 4, lines 52-57).

6. Claims 2, 6, 8, 10, 14-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tranchard and Feder as applied to claims 1, 5, 9, 13, and 17 above, and further in view of Sohraby (6,192,049, of record).

Regarding claims 2, 6, 10, 14, and 18, Tranchard and Feder disclose the data insertion mechanism, transceiver, method, computer program product, and data transport stream of claims 1, 5, 9, 13, and 17, wherein said bandwidth estimator produces said estimate of future available bandwidth from information

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regarding current programming to be transmitted by said transport stream (Feder, paragraph 371), but fail to disclose said bandwidth estimator also produces said estimate of future available bandwidth from periodic bandwidth utilization measurements for said transport stream.

In an analogous art, Sohraby teaches a network routing method wherein bandwidth utilization is periodically measured to ensure a more accurate prediction of network congestion and available resources (col. 2, lines 25-39 and col. 3, lines 30-38).

It would have been obvious at the time to a person of ordinary skill in the art to modify the data insertion mechanism, transceiver and method of Tranchard and Feder to include producing an estimate of future available bandwidth from periodic bandwidth utilization measurements, as taught by Sohraby, for the benefit of providing a more accurate prediction of available bandwidth that compensates for factors such as network congestion and available resources.

Regarding claim 8, Tranchard, Feder, and Sohraby disclose the transceiver of claim 6, wherein said insertion unit (25) replaces null packets (Tranchard, col. 10, lines 18-25) within an MPEG-2 transport stream (Tranchard, col. 4, lines 52-57).

Regarding claim 15, Tranchard, Feder, and Sohraby disclose the computer program product of claim 14, wherein the instructions further comprise

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replacing selected packets within said transport stream which include one of one or more selected packet type identifiers (PID values) with packets for said insertion content while passing packets which include packet type identifiers other than said selected packet type identifiers to for said new transport stream (only the null packets are replaced for insertion of content, Tranchard, col. 10, lines 18-56).

Regarding claim 16, Tranchard, Feder, and Sohraby disclose the computer program product of claim 15, wherein said instructions include replacing null packets (Tranchard, col. 10, lines 18-25) within an MPEG-2 transport stream (Tranchard, col. 4, lines 52-57).

### ***Conclusion***

7. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.



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## Certificate of Mailing

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D. Saltarelli whose telephone number is (571) 272-7302. The examiner can normally be reached on Monday - Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dominic Saltarelli  
Patent Examiner  
Art Unit 2611

DS



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